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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/678,214

Applicant(s)

NAKAMURA ET AL.

Examiner

SARI SAWAGED

Art Unit

2423

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/21/2008 have been fully considered but they are not persuasive.

Applicant argues that Ellis fails to disclose "wherein in the program search, a plurality of programs that match the search condition and that are contained in the received digital broadcast are presented to a user for a predetermined time in sequence" in that "Ellis fails to disclose presenting a plurality of programs included in received digital broadcast data, for a predetermined time in sequence". The examiner respectfully disagrees. Ellis discloses that the invention includes a demultiplexer 336 which may extract the digital radio data for a particular radio station from several digital radio station that may be multiplexed within the single carrier (see numbered p.17 ll. 11-13), wherein the digital radio data may be digital broadcast radio data (see satellite radio antenna 314 in fig. 3A). **Ellis meets the limitation "digital broadcast data" by disclosing digital radio data. Further, each radio station multiplexed within the single carrier is broadcasting a radio program, which reads on the claim limitation "a plurality of programs included in received digital broadcast data".**

Ellis discloses that a user may "specify content preferences" also disclosed as "likes or dislikes" (conditions) for programs (see page 28 lines 22-29) that can be used to search "program schedules" (program guide information) received by the apparatus for programs matching the preferences (see page 8 lines 1-2, 9-13 and page 28 lines 22-29)). Further Ellis discloses creating groups based on user-specified criteria, wherein

the criteria of the group may be based on a genre of music or on a specific performing artist. **The “content preferences”, “likes or dislikes”, and “groups” disclosed by Ellis meet the limitation “program search”.** Ellis further discloses that the apparatus may compare information about the user’s likes and dislikes with information about the radio station (such as the name of the station, the playlist, the genre of music played, etc. see numbered page 38 ll. 19-33), wherein the apparatus may **automatically tune** to the recommended **stations**. Ellis also discloses a **scan feature**, wherein the apparatus briefly plays audio from the available stations (for a predetermined time, e.g. 1 or 2 seconds before switching to a next station, see fig. 40 and numbered p. 51 ll. 1-4) in sequence (see numbered p. 7 ll. 23-26). **Ellis’ disclosure of automatically tuning to the recommended stations and the scan feature read on the claim limitation “presented to a user for a predetermined time in sequence”.** The examiner would like to point out that the scan feature disclosed by Ellis, as understood by the examiner, isn’t a conventional scan of ALL channels/stations/programs since Ellis discloses that the apparatus skips over disliked programming content or groups that are blocked by the user (such as an unacceptable parent advisory level see numbered p. 35 ll. 18-20).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 3, 5, 8-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Ellis (WO 02/067447).

Claims 1, 13:

Ellis discloses a digital broadcast reception apparatus/method for receiving a digital broadcast including a program and program guide information for providing a guide to a program content, the digital broadcast reception apparatus comprising:

a broadcast reception unit (disclosed as "receiver 110"; see Page 15 lines 15-16) for receiving a digital broadcast on air (see page 15 lines 23-24);

a condition determination unit for determining whether or not the program matches a search condition based on the program guide information received by the broadcast reception unit (Ellis discloses that a user may "specify content preferences" also disclosed as "likes or dislikes" (conditions) for programs (see page 28 lines 22-29) that can be used to search "program schedules" (program guide information) received by the apparatus for programs matching the preferences. (see page 8 lines 1-2, 9-13 and page 28 lines 22-29)); and

a program search unit for making a program search by controlling the broadcast reception unit to continue to receive the digital broadcast containing the program, if it is determined by the condition determination unit that the program matches the search

condition (Ellis discloses that his apparatus searches a database of radio stations (see page 3 lines 1 and 16-17), the database including program schedules (see page 8 lines 9-13), and finds one or more station that matches the users search criteria (search conditions). The apparatus controls the receiver (broadcast reception unit) by automatically changing to a (radio) station with the content of interest (see Page 7 lines 31-32). The apparatus disclosed by Ellis inherently has a "program search unit" for searching desired content on radio stations. The apparatus creates a list of radio stations (see page 8 lines 4-7), which meet the users search conditions, which the user can choose from, thereby continuing to receive the digital broadcast containing the programs matching the search condition.

to stop receiving the digital broadcast containing the program, if it is determined by the condition determination unit that the program does not match the search condition and to receive another digital broadcast (Ellis discloses that his apparatus may automatically change to the station with the content of interest (see page 7 lines 31-32). Ellis also discloses that the apparatus creates a list of radio stations (see page 8 lines 4-7), which meet the users search conditions, which the user can choose from. This list excludes the radio stations that do not contain content of interest according to the user's search criteria. By changing from radio stations that do not contain content of interest, Ellis has disclosed "stop receiving digital broadcast containing the program that does not match the search condition and to receive another digital broadcast.)

wherein in the program search, a plurality of programs that match the search condition and that are contained in the received digital broadcast are presented to a user for a predetermined time in sequence (Ellis discloses that the apparatus includes a demultiplexer 336 which may extract the digital radio data for a particular radio station from several digital radio station that may be multiplexed within the single carrier (see numbered p.17 ll. 11-13), wherein the digital radio data may be broadcast radio data (see satellite radio antenna 314 in fig. 3A). Each radio station multiplexed within the single carrier is broadcasting a radio program, which reads on the claim limitation "a plurality of programs included in received digital broadcast data". Ellis further discloses that the apparatus may compare information about the user's likes and dislikes (search condition) with information about the radio station (such as the name of the station, the playlist, the genre of music played, etc. see numbered page 38 ll. 19-33), wherein the apparatus may automatically tune to the recommended stations. Ellis also discloses a scan feature, wherein the apparatus briefly plays audio from the available stations (for a predetermined time, e.g. 1 or 2 seconds before switching to a next station, see fig. 40 and numbered p. 51 ll. 1-4) in sequence (see numbered p. 7 ll. 23-26). Ellis' disclosure of automatically tuning to the recommended stations (stations meeting that match the search condition) and the scan feature read on the claim limitation "presented to a user for a predetermined time in sequence"). See the Response to Arguments section above.

Claim 2:

Ellis discloses the digital broadcast reception apparatus according to claims 1, as discussed previously.

Ellis discloses that his apparatus includes an input unit such as a keyboard or mouse for allowing the user to enter (search) criteria (conditions) for a preferred "group" (genre) of programming (see page 36 lines 3-6).

The apparatus disclosed by Ellis inherently has a condition setting unit for setting the condition input in the condition input unit as the search condition because the stations/programming/groups matching the criteria that the user has entered will be provided to the user. Therefore, the condition set by the user is the search condition.

Claim 3:

Ellis discloses the digital broadcast reception apparatus according to claim 2, as discussed previously. Ellis discloses that condition selected by the user can be from a (previously prepared) "pull down list 2010" containing groups (genres of music). This pull down list contains groups created by users, programmers, or advertisers. The group selected from the list comprises the search condition.

Claim 5:

Ellis discloses the digital broadcast reception apparatus according to claim 2, as discussed previously. Ellis discloses that the apparatus accepts the genre of the program as the search condition (see page 36 lines 11-12).

Claim 8:

Ellis discloses the digital broadcast reception apparatus according to claim 2, as discussed previously. Ellis discloses that the user can use a "keyboard 365" as a condition input unit to enter a keyword concerning the "program detail information" (program genre) (see Page 36 lines 4-15). The apparatus sets the search condition to receive a program containing the keyword input by the user (see page 37 lines 6-8).

Claim 9:

Ellis discloses the digital broadcast reception apparatus according to claim 1, as discussed previously.

a request input unit allowing to input a program trial reception request while the program search unit is executing the program search; (Ellis discloses that his apparatus can perform a scan of the database for stations matching the users criteria (this is a program search) (see page 8 lines 24-25). Ellis discloses that the database can include *stations*, format, geographical reach, *program schedules* (see page 8 lines 12-13). Ellis further discloses the user can "stop the scan" (this is a program trial

reception) (if the user finds the programming desirable) (see page 7 lines 23-26) when scanning the radio stations (performing a program search).

a control unit for controlling the program search unit to stop the program search and controlling the broadcast reception unit to execute program trial reception when the program trial reception request is input into the request input unit (Ellis discloses a "controller 145" (control unit) (see page 15 lines 29-30) for controlling the functions of the reception apparatus (including the program search unit). Ellis further discloses that the program search is stopped to perform a program trial reception (the user can listen to the programming longer than the brief predetermined time a station is played during a scan) (see page 7 lines 23-26).

Claim 10:

Ellis discloses the digital broadcast reception apparatus according to 9, as discussed previously.

Ellis discloses the request input unit allows the user to input a program search restart request for stopping the program trial reception and restarting the program search (Ellis discloses that when the user stops the scan, the apparatus waits for a period of time (before canceling the search) in case the user decides to resume scanning (program search) (see page 51 lines 1-9);

when the program search restart request is input into the request input unit, the control unit controls the program search unit to restart the program search at the program search stop state (Ellis discloses that the program search is resumed when a user decided to cancel the stop scan request. The scan is inherently resumed from the stop state since the scan is resumed and not restarted (see page 51 lines 1-9).

Claim 11:

Ellis discloses the digital broadcast reception apparatus according to claim 10, as discussed previously.

Ellis discloses retaining the user preferences (search conditions) set by the condition setting unit (see page 40 lines 1, 15). Ellis also discloses that a user may create "groups" (search conditions by program genre, artist, etc...) which are saved in "a pull down list 2010" (condition retention unit) (see page 36 lines 3-6, 11-14, 28-29; page 37 lines 6-8).

Claim 12:

Ellis discloses the digital broadcast reception apparatus according to claim 11, as discussed previously. Ellis discloses that the condition determination unit determines whether or not the program matches the search condition retained in the condition retention unit (Ellis discloses that when the apparatus determines that a program matches a group selected (from the pull down list) by the user, the user can specify the

action the apparatus takes (see page 37 lines 1-2, 6-7). Ellis' invention meets the limitation of claim 12.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis in view of Maze et al. (hereinafter referred to as Maze) (US 6,216,264) (of record).

Claim 4:

Ellis discloses the digital broadcast reception apparatus according to claim 2 as discussed previously.

Ellis doesn't disclose "an operation of specifying a logical operation for the conditions".

Maze, an inventor from the same or a similar field, discloses using logical operators "AND", "OR", and "NOT" along with a plurality of conditions when searching for programs.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use logical operators with a plurality of search conditions because it would have enabled the user to further limit the search. For example, a user can search for a specific artist in a specific genre by using the "AND logical operator instead of only specifying a genre or an artist. Maze gives an example of searching a term "ZULU" and "MICHAEL CAINE" (an actor in the movie title ZULU). If "ZULU" was entered by itself, the movie "ZULU" AND any other television program concerning the ZULU tribe would have been selected.

5. Claims 6, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis in view of Hayashi (US 6,588,014) (of record).

Claim 6:

Ellis discloses the digital broadcast reception apparatus for receiving a digital broadcast including a program and program guide information for providing a guide to a program content, as disclosed in claim 2.

Ellis' invention is related to receiving digital audio programming services and therefore doesn't disclose service types video and temporary or specifying at least one of the service types as the condition input in the condition input unit.

Hayashi, an inventor from the same or a similar field, discloses that a service can also be comprised of only video or audio data (see Col. 6 lines 12-15). A user can specify a service type of audio (foreign music, domestic music) or video (foreign film, domestic film) when searching for programming (see Fig. 18). Hayashi discloses the search in Figure 18 as a "genre" search, however, Hayashi also differentiates between the audio and video services (music and film) and further classifies each service under genres ("domestic" and "foreign").

The applicant claims "data" and "temporary" service types. The examiner understands the data service type to be data broadcast with programming comprising SI (service information), PSI (program specific service information), and data forming the program (see page 16 lines 8-17). SI and PSI are used in making EPGs.

Ellis discloses "information" (data) broadcast with programming and this information can include program schedules (EPGs) (see page 8 lines 8-13) which can be used to search for desired content.

The applicant doesn't disclose what the "temporary" service type comprises. The examiner understands this service to be either audio or video type service.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the inventions of Ellis and Hayashi so as to enable users of mixed service receivers (audio and video) to be able to search for desired programming based on the service type as disclosed by Hayashi (see Fig. 18).

Claim 7:

Ellis discloses the digital broadcast reception apparatus according to claim 1, as discussed previously.

Ellis further discloses that his invention can receive broadcast programs from multiple sources (internet, radio, satellite, cable, AM, FM) (see page 16 lines 28-32) and the user can scan (search) across multiple sources (see 51 lines 11-12).

Hayashi discloses a digital broadcast signal including a plurality of service types (see rejection of claim 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the inventions of Ellis and Hayashi to enable a user to search across all the services/sources because it would have allowed the user to find desired content that is broadcast in various service types/sources. It would have allowed a user to search for music/movies that a particular artist is in.

Conclusion

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARI SAWAGED whose telephone number is (571)270-5085. The examiner can normally be reached on Mon-Thurs, 9:00AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ANDREW KOENIG can be reached on (571) 272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sari Sawaged/
Examiner, Art Unit 2423

/Andrew Y Koenig/
Supervisory Patent Examiner, Art Unit 2423